January 1973

Test 1126: International 464 Gasoline

Tractor Museum
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NEBRASKA TRACTOR TEST 1126 – INTERNATIONAL 464 GASOLINE

POWER TAKE-OFF PERFORMANCE

Hp	Crank-shaft speed rpm	Fuel Consumption Gal per hr	Fuel Consumption Lb per hp-hr	Hp-hr per gal	Temperature Degrees F Cooling medium	Temperature Degrees F Air wet bulb	Temperature Degrees F Air dry bulb	Barometer inches of Mercury
MAXIMUM POWER AND FUEL CONSUMPTION								
Rated Engine Speed—Two Hours (PTO Speed—605 rpm)								
45.74	2400	4.405	0.594	10.38	188	62	75	29.040
Standard Power Take-off Speed (540 rpm)—One Hour								
43.64	2142	4.040	0.571	10.80	188	62	75	29.045
VARYING POWER AND FUEL CONSUMPTION—Two Hours								
41.13	2537	4.187	0.628	9.82	179	61	75	.....
0.00	2601	1.663	.....	.....	172	61	75	.....
20.79	2564	2.801	0.831	7.42	178	61	75	.....
46.08	2399	4.386	0.587	10.51	186	62	76	.....
10.41	2569	2.237	1.326	4.65	175	61	75	.....
30.85	2537	3.385	0.677	9.11	178	61	75	.....
Av 24.88	**2534**	**3.110**	**0.771**	**8.00**	**178**	**61**	**75**	

DRAWBAR PERMORMANCE

Hp	Draw-bar pull lbs	Speed miles per hr	Crank-shaft speed rpm	Slip of drivers %	Fuel Consumption Gal per hr	Fuel Consumption Lb per hp-hr	Hp-hr per gal	Temp Degrees F Cool-ing med	Temp Degrees F Air wet bulb	Temp Degrees F Air dry bulb	Barometer inches of Mercury
VARYING DRAWBAR POWER AND FUEL CONSUMPTION WITH BALLAST											
Maximum Available Power—Two Hours—3rd Gear (3 Lo)											
41.06	3423	4.50	2387	5.94	4.255	0.639	9.65	180	61	73	28.965
75% of Pull at Maximum Power—Ten Hours—3rd Gear (3 Lo)											
33.87	2646	4.80	2525	5.15	3.821	0.695	8.86	176	52	52	28.532
50% of Pull at Maximum Power—Two Hours—3rd Gear (3 Lo)											
24.65	1871	4.94	2555	3.54	3.201	0.801	7.70	175	55	56	28.590
50% of Pull at Reduced Engine Speed—Two Hours—5th Gear (1 Hi)											
24.37	1838	4.97	1530	3.30	2.654	0.671	9.18	175	54	56	28.635
MAXIMUM POWER WITH BALLAST											
29.54	5465	2.03	2568	12.39	1st Gear (1 Lo)			175	49	63	29.000
39.07	4508	3.25	2399	8.71	2nd Gear (2 Lo)			176	54	62	29.010
42.20	3506	4.51	2399	6.20	3rd Gear (3 Lo)			178	57	66	29.000
40.41	2556	5.93	2398	4.19	4th Gear (4 Lo)			176	57	66	29.000
41.72	2003	7.81	2399	3.06	5th Gear (1 Hi)			179	59	74	28.990
38.65	1123	12.90	2400	1.23	6th Gear (2 Hi)			178	59	74	28.990

VARYING DRAWBAR PULL AND TRAVEL SPEED WITH BALLAST—3rd Gear (3 Lo)

Pounds Pull	3506	3734	3871	3908	3918	4043	3815
Horsepower	42.20	40.21	36.81	32.68	28.16	24.10	18.36
Crankshaft Speed rpm	2399	2156	1911	1682	1446	1203	967
Miles Per Hour	4.51	4.04	3.57	3.14	2.70	2.24	1.81
Slip of Drivers %	6.20	6.53	6.86	7.09	6.98	7.31	6.98

TRACTOR SOUND LEVEL	dB (A)
Maximum Available Power 2 Hours	95.0
75% of Pull at Max. Power 10 Hours	95.0
50% of Pull at Max. Power 2 Hours	93.5
50% of Pull at Reduced Engine Speed 2 Hours	91.5
Bystander 8th gear (4 Hi)	81.0

TIRES, BALLAST AND WEIGHT		With Ballast	Without Ballast
Rear Tires	—No, size, ply & psi	Two 14.9-28;6;16	Two 14.9-28;6;16
Ballast	—Liquid	680 lb each	None
	Cast Iron	550 lb each	None
Front Tires	—No, size, ply & psi	Two 6.50-16;4;20	Two 6.50-16;4;20
Ballast	—Liquid	None	None
	Cast Iron	None	None
Height of drawbar		13 inches	13½ inches
Static weight with operator—Rear		5660 lb	3200 lb
	Front	1695 lb	1695 lb
	Total	7355 lb	4895 lb

Department of Agricultural Engineering
Dates of Test: April 27 to May 17, 1973
Manufacturer: INTERNATIONAL HARVESTER COMPANY, CHICAGO ILLINOIS

FUEL, OIL AND TIME **Fuel** Lead free gasoline **Octane No** **Motor** 82.7 **Research** 91.6 (rating taken from oil company's typical inspection data) **Specific gravity converted to 60°/60°** 0.7410 **Weight per gallon** 6.169 lb **Oil SAE** 30 **API service classification** I.H. Low ash engine oil SAE 30 recommended or API service classification CD and CC **To motor** 1.475 gal **Drained from motor** 1.051 gal **Transmission and final drive lubricant** Hy-Tran fluid **Total time engine was operated** 46 hours .

ENGINE **Make** International gasoline **Type** 4 cylinder vertical **Serial No** 175CT2U002740* **Crankshaft mounted** lengthwise **Rated rpm** 2400 rpm **Bore and stroke** 3.562" x 4.390" **Compression ratio** 7.19 to 1 **Displacement** 175 cu in **Carburetor size** 1" **Ignition system** battery **Cranking system** 12 volt electric **Lubrication** pressure **Air cleaner** dual stage dry type with replaceable pleated paper element and automatic dust unloader **Oil filter** full flow treated paper screw-on cartridge **Oil cooler** radiator for transmission and hydraulic fluid **Fuel filter** Screen in sediment bowl **Muffler** was used **Cooling medium temperature control** thermostat.

CHASSIS **Type** standard **Serial No** 2210146U100098* **Tread width** rear 52" to 76" front 48" to 80" **Wheel base** 75.2" **Center of gravity** (without operator or ballast, with minimum tread, with fuel tank filled and tractor serviced for operation) Horizontal distance forward from center-line of rear wheels 26.3" Vertical distance above roadway 29.6" Horizontal distance from center of rear wheel tread 0" to the right/left **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio **Advertised speeds mph** first 2 second 3½ third 4¾ fourth 6¼ fifth 8 sixth 13 seventh 17¾ eighth 22¾ reverse 2¾, 4½, 6 and 7¾ **Clutch** single plate dry disc operated by foot pedal **Brakes** wet single disc hydraulically power actuated by two foot pedals that can be locked together with automatic equalizing **Steering** hydrostatic **Turning radius** (on concrete surface with brake applied) right 110" left 110" (on concrete surface without brake) right 124" left 124" **Turning space diameter** (on concrete surface with brake applied) right 231" left 231" (on concrete surface without brake) right 259" left 259" **Power take-off** 605 rpm at 2400 engine rpm.

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

REMARKS: All test results were determined from observed data obtained in accordance with SAE and ASAE test code or official Nebraska test procedure.

Pull in 1st gear was limited by the tire tangential pull factor. Seventh and eighth gears were not run as test procedure requires only six travel speeds.

We, the undersigned, certify that this is a true and correct report of official Tractor Test 1126.

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